

creating a multi-tone [an] acoustic signal [waveform] in the form of first digital audio samples;

transmitting the first digital audio samples via the RF [said radio] link;

converting [said] the first digital audio signals to an analog audio waveform such that the analog audio waveform is the acoustic equivalent of the first digital audio samples;

acoustically emitting the [said] analog audio waveform [as an acoustic signal] via a loudspeaker;

in the [said second] RF equipped POS device:

receiving the [said] first digital audio samples via [said radio] the RF link;

receiving the analog audio waveform [said acoustic signal] via a microphone;

converting the analog audio waveform [said received acoustic signal] to second digital audio samples;

comparing the first digital audio samples against the second digital audio samples to determine if they match, and if the first digital audio samples match the second digital audio samples, then

[determining the time difference between the arrival of said first digital audio samples and said acoustic signal; and]

determining the distance between the portable wireless communication [said first RF equipped] device and [said second] the RF equipped POS device based on the known speed of propagation of radio waves, the known speed of sound, and the time difference between the arrival of the [said] first digital audio samples and the [said] acoustic signal.

2. (Cancelled).

3. (Currently Amended) The method of claim 1 wherein the RF [said radio] link is Bluetooth™.

4. (Currently Amended) The method of claim 1 further comprising terminating an exchange of further radio messages between the portable wireless communication device [said first and second RF equipped devices] and the RF equipped POS device if the distance between the two devices [determined] is greater than a threshold value.

5. (Original) The method of claim 1 further comprising terminating the performance of a financial transaction if the distance determined is greater than a threshold value.

6. (Currently Amended) In a portable wireless communication [an RF equipped] device, a method of [automatically] determining the distance between the portable wireless communication [said RF equipped] device and a [second] RF equipped POS device, the RF equipped POS [said second RF] device capable of emitting a multi-tone [an] acoustic signal and transmitting a radio signal that is a digitized version of the multi-tone acoustic signal, the [said] method comprising:

receiving [first digital] the digitized version of the multi-tone acoustic signal in the form of first digital audio samples via an RF [a radio] link;

receiving the multi-tone [an] acoustic signal via a microphone;

converting the [said] received multi-tone acoustic signal to second digital audio samples; [and]

comparing the first digital audio samples against the second digital audio samples to determine if they match, and if the first digital audio samples match the second digital audio samples, then

determining the time difference between the arrival of the [said] first digital audio samples and the multi-tone [said] acoustic signal; and

determining the distance from the [said second] RF equipped POS device based on the known speed of propagation of radio waves, the known speed of sound, and the time difference between the arrival of the [said] first digital audio samples and the multi-tone [said] acoustic signal.

7. (Cancelled)

8. (Currently Amended) The method of claim 6 wherein the RF [said radio] link is Bluetooth™.

9. (Currently Amended) A portable wireless communication [An RF equipped] device capable of [automatically] determining the distance between itself and a [second] RF equipped POS device wherein the [said second] RF equipped POS device emits a